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AUTHOR Bodomo, Adams B.; van Oostendorp, Marc
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ABSTRACT

This paper examines nominalization and serial verb construction (SVC) in Dagaare, a West African language. It discusses nominalization theory and its relation to Germanic languages such as English, German, and Dutch, using insights gained from the study of these languages to help illuminate nominalization in Dagaare and other similar West African languages. Serial verb nominalization (SVN) in Dagaare is then examined. SVN in Dagaare gives rise to a pattern in which the shared object precedes all verbal predicates, whereas normal SVC shows a pattern in which the direct object surfaces in between the governing verbs. Contains 21 references. (MDM)

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SERIAL VERB NOMINALISATIONS IN DAGAARE

by
Adams B. Bodomo, University of Trondheim, Norway
and
Marc van Oostendorp, University of Tilburg, Netherlands

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Postal Address:

Adams Bodomo
Department of Linguistics,
University of Trondheim,
N-7055, Dragvoll, Norway.

Tel: +47 73 59 65 31 (work)
+47 73 88 85 79 (home)
Fax: +47 73 59 61 19

e_mail: adams.bodomo@avh.unit.no

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Abstract

Nominalisation and Serial Verb Constructions (SVCs) are two widely attested phenomena in the linguistic literature. However, so far, there seems to be no published attempt at accounting for the interaction between the two phenomena.

Our paper focusses on issues involving both Nominalisation and SVCs. We explore the most wide-spread theoretical insights into nominalisation as they are known from Germanic languages like English, German and Dutch, and serialisation in the West African language, Dagaare and its closest relatives. We subsequently turn our attention to Serial Verb Nominalisations (SVNs) in Dagaare. The interesting fact about SVNs is that they give rise to a pattern in which the shared object precedes all the verbal predicates whereas 'normal' SVCs in Dagaare show a pattern in which the direct object surfaces in between the governing verbs and 'simple' verbal phrases show a uniquely determined SVO order.

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The question now arises how the interacting theories of nominalisation and serialization help account for the respective orders. Our claim is that interesting issues that have often not been unearthed in separate treatments of nominalisation and serialisation are brought to light in our paper. We propose that the facts should be related to the internal structure of the Dagaare Determiner Phrase, the analysis of SVCs, and the 'complex predicate formation' that occurs in nominalisation constructions of the Germanic languages. In these languages it is not allowed to split a verb particle complex in a nominalisation, even though it is perfectly alright to do so in a 'normal' verbal predicate.

1. Introduction*

Both Serial Verb Constructions (SVCs) and Nominalisation are topical issues within generative syntax (e.g. Sebba 1987, Baker 1989, Joseph and Zwicky 1990 and Lefebvre 1991 for SVCs; Chomsky 1970, Hoekstra 1986, and Haaften & Zubizarreta 1987 for Nominalisation). The right way to approach both problems is still subject to debate. Perhaps the intersection of these two fields can shed some new light on either of them. Here we will list the features of Serial Verb Nominalisations (SVNs) in Dagaare. Dagaare is a Gur or Voltaic language spoken by up to a million people in the Northwestern parts of

* Parts of this paper were read at various places and we benefitted from comments and suggestions by several people. We are grateful for all such comments and suggestions. In particular, we thank people at the Department of Linguistics, Trondheim, particularly Prof. Lars Hellan, Prof. Thorstein Fretheim and some participants at the 24th ACAL, Columbus, Ohio, especially Professors Salikoko Mufwene and Joel Bradshaw for their insightful comments. We are, however, responsible for any errors and inaccuracies that may be detected.

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Ghana and adjoining areas in Burkina Faso. We can only hope to give the beginning of an analysis for these complicated facts, which to our knowledge have never been noted in any language before.

2. Facts

First, we will set up the basic facts of Dagaare syntax which are of relevance to us here. Although there are some complicating factors, we will assume Dagaare to be an SVO language. A simple sample sentence is given in (1):

- (1) Bayɔɔ di la a saav
 Bayor eat-PERF a.m the millet pulp
 'Bayor has eaten the millet pulp'

The particle , *la* , glossed as 'a.m.' (affirmative marker) in this and other constructions is a particle marking the sentence as positive and declarative. Tones are omitted in our vocalic representations.

In most types of serial verb constructions (SVCs) in Dagaare and other serialising languages, the direct object is positioned between the two verbs that share it.

- (2) Ayuo dug la nen ɔɔ
 Ayuo boiled a.m. meat chew
 'Ayuo boiled the meat and chewed it'

Verbs can, in principle, serialise without limits. This, of course, is a characteristic known from other serial verb languages. In (2) there are two verbs, in (3) three, but one could also think of constructions with

four, five or even more verbs serialised. There are, however, some constraints on verb serialisation, as stated in section 3.2.

- (3) A biə zo gaa di la a saau
 The child ran went ate a.m. the millet pulp
 'The child ran (and) went (and) ate the millet pulp'

A falling tone on each of the verbs may indicate that they are in a perfective aspect, although this does not necessarily distinguish between them and the neutral, 'dictionary form' of the verbs. All verbs have to appear in the same aspectual form, except for cases of pseudocomplemented SVCs (see Bodomo (1993: 81). For instance, (4), where one of the verbs is in the imperfective whereas the rest are in the perfective is out.

- (4) *A biə zo gars di la a saau
 the child run go-IMP eat a.m the millet pulp

We now turn our attention to nominalising constructions. A verb like *di* 'to eat' can be nominalised by marking it with the ending *-(i)u*. If it appears, the direct object stands to the left of the head in these constructions. Compare (5a) to (5b), for example.

- (5a) Bayɔɔ dirə la a saau
 Bayor eat-IMP a.m the millet pulp
 'Bayor is eating the millet pulp'
- (5b) A saau diiu wa baar
 the millet pulp eat+NOM not finished

'The eating of the millet pulp is not yet finished'

The construction in (5b) is introduced by the definite article *a*. Instead of this we could also have an NP in the position of this determiner. This NP would then denote the agent of the action. Finally, the position can also be left empty.

- (6a) Bayuo saau diiu viɛɛ la
 Bayuo millet pulp eat+NOM good a.m.
 'Bayuo's eating of the millet pulp is good'

- (6b) Saaυ diiu numɔ la
 millet pulp eat+NOM sweet a.m.
 'Eating millet pulp is nice'

Bayuo in this position could be a genitive or it could be a nominative. We cannot tell because the language lacks overt case marking (cf. (7)):

- (7) Bayuo gan wa viɛɛ
 Bayuo book not good
 'Bayuo's book is not good'

The direct object can be a bare noun like in (6) and (8a), but it can also be an NP of more complexity (8b&c):

- (8a) Oraa diiu numɔ la
 berry eat+NOM sweet a.m.
 'Eating a berry is nice'

- (8b) A oraa nys diiu numo la
 the berry this eat+NOM sweet a.m.
 'The eating of this berry is nice'

- (8c) A orri nys ayi diiu numo la
 the berries these two eat+NOM sweet a.m.
 'Eating these two berries is nice'

The resulting structure can be modified by an adjective - which is incorporated into the head as in (9a) or by an adverb as in (9b). The variant with the adverb is far more common, however:

- (9a) A saau di-viɛlʊʔ
 the millet pulp eating-good
 'The good eating of millet pulp'

- (9b) A saau vilaa diiu
 the millet pulp good eat+NOM
 'The good eating of millet pulp'

These are the observations concerning the basic structure of the Dagaare verbal and nominal phrase. We arrive at the central observation of this paper: also serial verb constructions can nominalise. The last of the series of verbs gets the characteristic ending 'u' in these cases. All the other verbs keep their verbal morphology. If there is a

direct object to the last verb, it can only occur at the outer left of the verbal cluster¹:

- (10) A nən dug ɔɔv
 the meat boil chew+NOM
 'The cook chewing of the meat' i.e.
 'The cooking of the meat in order to eat'
- (11a) A saaʋ zo gaa diiʉ
 the millet pulp go run eat+NOM
 'The run go eating of the millet pulp' i.e.
 'Running there in order to eat the millet pulp'
- (11b) *A zo gaa saaʋ diiʉ
 (11c) *A zo saaʋ gaa diiʉ

Not just the direct object NP, but also other constituents appear obligatorily to the left of the verbal cluster. (*wiewie* in (12) means 'quickly'):

- (12a) A saaʋ wiewie zo gaa diiʉ
 (12b) ?*A wiewie zo gaa saaʋ diiʉ
 (12c) *A wiewie zo saaʋ gaa diiʉ

It seems that for one reason or another, the verbs have to be obligatorily adjacent in these constructions. As far as we know there is no theory of SVCs that could account for these facts in a satisfying way.

¹ Notice that the nominalising suffix surfaces as u here, due to a general process of ATR vowel harmony.

The two verbs that have no nominalisation morphology still show the tone contour, possibly indicating perfective aspect. It is impossible to use the imperfective in these constructions:

(13a) *A saaʋ zoro gere diiu
 the millet pulp run+IMP go+IMP eat+NOM

(13b) *A nen dugro ɔɔʋ
 the meat boil+IMP chew+NOM

Perhaps we can conclude that the nominalised form is inherently in the perfective aspect. Tense can also not be expressed in nominalised constructions. Compare the sentences in (14) with nominalised constructions in (15):

(14a) A biə na zo gaa di la a saaʋ
 the child FUT run go eat a.m. the millet pulp
 'The child will run there (and) eat the millet pulp'

(14b) A biə da zo gaa di la a saaʋ
 the child PAST run go eat a.m. the millet pulp
 'The child has run there and eaten the millet pulp'

(15a) *A saaʋ na zo gaa diiu
 the millet pulp FUT go run eat+NOM

(15b) *A saaʋ da zo gaa diiu
 the millet pulp PAST run go eat+NOM

In these sentences *na* is the Future Tense marker and *da* is the Past Tense marker.

3. Analysis

We now turn our attention to an analysis of these facts, couched within a modern GB-type of theory. Two types of problems have to be tackled: first what is the nature of the Dagaare nominalisation construction? This we answer in section 3.1. Secondly, what is the nature of the Dagaare serial verb construction and how can it explain the facts with regard to nominalisation? We will discuss these two questions one by one.

3.1 The Nominal Phrase of Dagaare and Nominalisation

The first question that has to be answered is why the order of direct object and verb is reversed in the nominalisation construction. This question is more or less independent from the serialising facts. Even non-serialised verb constructions behave this way, as we have seen in (5), repeated here:

(16a) Bayoo dire la a saau

Bayor eat-IMP a.m. the millet pulp

'Bayor is eating the millet pulp'

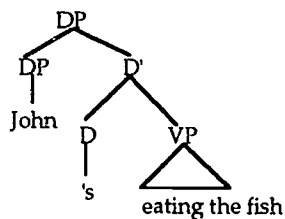
(16b) A saau diiu wa baar

the millet pulp eat+NOM not finished

'The eating of the millet pulp is not yet finished'

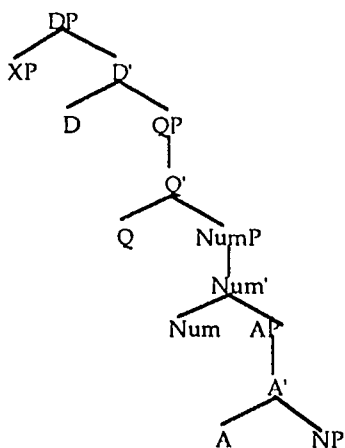
It has been proposed by Abney (1987) that English nominalisation constructions have the following structure:

(17)



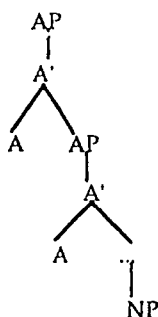
In this view, a nominal gerund constitutes a Determiner which exceptionally takes a verbal projection as its complement, instead of a nominal projection. Actually, Abney proposed an internal structure for the DP which was somewhat more complicated than is suggested in (17) and later work has expanded this structure even more. Quite a few intermediary projections have been proposed to come in between DP and NP. Not all these intermediary projections are relevant but for completeness sake we will give a somewhat more complicated structure below:

(18)



The DP is assumed to contain elements like determiners and demonstratives, and Q contains elements like numerals and other quantifier heads or phrases. The content of Num (Valois 1991 for French, Ritter 1991 for Hebrew, Carstens 1991 for Swahili) is not always very clear. We will assume that Num0 is filled with the plural morpheme in Dagaare. A lot of discussion has also been going on about the status of attributive adjectival phrases. We follow Abney (1987), Bernstein (1991), Cinque (1992) and others in assuming that attributive adjectives select for an NP complement. If there is more than one attributive adjective, we have a recursion of AP phrases:

(19)



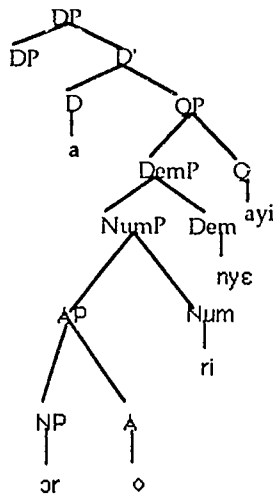
Now look at the Dagaare DPs in (20):

(20a) A orri nye ayi
 the berries these two
 'These two berries'

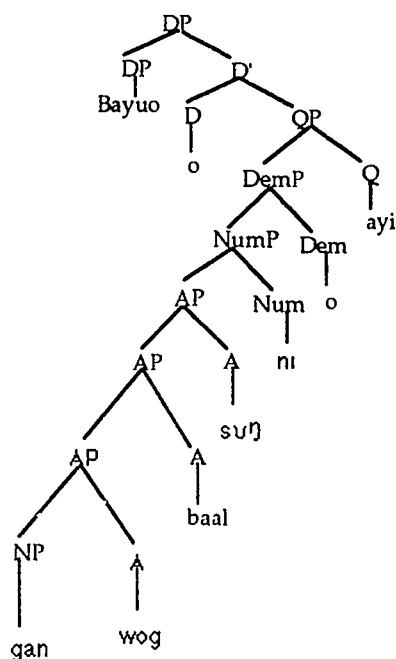
(20b) Bayuo gan bil zi wog baal sunni ayi
 Bayuo's book small red long slender good+pl two
 'Bayuo's two small, red, long, slender, good books'

Apart from the determiner, *a*, and possessive phrases, all elements in these phrases follow the head noun. Tentatively, we may conclude that this means that, except for DP, all projections in the Dagaare nominal phrase are head final. We thus get the following structures for (20a) and (20b) respectively (some of the irrelevant intermediary structure is omitted):

(21a)

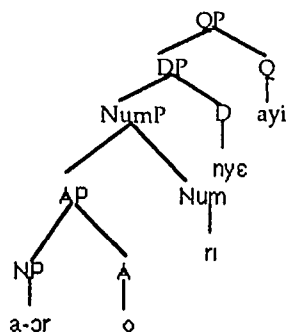


(21b)



Contrary to what we claimed above, the demonstratives and determiners have been given their own projections here. This is not a matter of necessity. We could also assume a structure like the following:

(21c)



In this structure all nominal functional projections are left-headed. The determiner 'ə' behaves as a clitic, coindexed with D0 (similar to the Scandinavian double definite constructions like in the Norwegian *det unge barn-et* 'the young child-the')

The structure of DP and DemP is not of great importance to our present paper and for the sake of convenience, we will keep to the above alternative analysis.

Bodomo (1993) argues that the noun-adjective complex should be analysed as one single word on the basis of the following data:

- (22a) *yiri, yiə; zɛ; kpoŋ*
house houses red big

- (22b) *yizɛ*
house+red
'red house'

- (22c) *yiziri*
house+red+pl
'red houses'

- (22d) *yizkpoŋ*
house+red+big
'Big red house'

- (22e) *yizikponni*
house+red+big+pl
'Big red houses'

- (23a) *gbaŋŋu; bila; gyia*
book small red
but

(23b) *gba'ɲbiligyɛ*

book+small+red

'small red book'

(23c) *gba'ɲbiligyɛsi*

book+small+red+pl

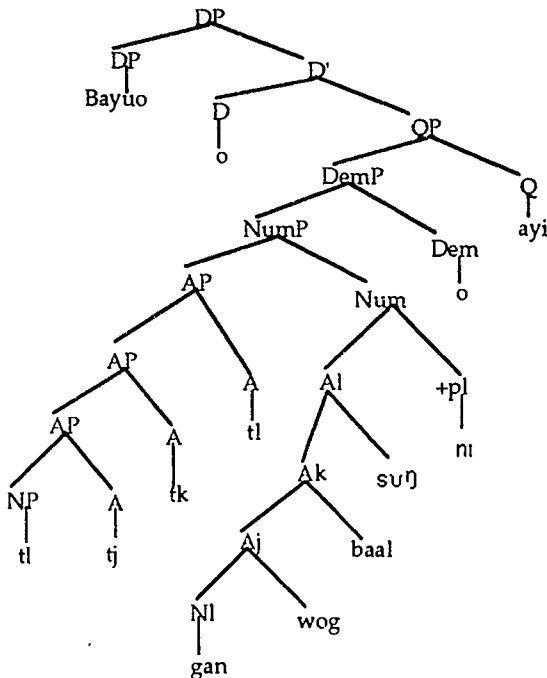
'small red books'

Bodomo (1993) observes that

In both Dagaare and Mampruli, as can be seen from the data, only the stem of the noun is available when the noun takes on one or more adjectives. Indeed adjectives also lose part of their endings when they combine with a following adjective. The noun and adjective(s) can be seen as forming one word. This observation is buttressed by the fact that the plural of the whole complex appears at the end of the last adjective.

The word formation observed by Bodomo (1993) can be easily described as a syntactic process in the framework presented here: the lexical noun moves to Num $\bar{0}$. Because of minimality requirements, it cannot skip any of the intermediary (A0-)heads. If we take (21b) as the underlying form, we can derive the following (s-)structure:

(24)



We assume a model of morphology/phonology interface in which the morphological module works on the output of S-structure (Halle and Marantz 1993), i.e. on (24). The resulting word is consequently analysed by the morphology as one morphological complex. There is no evidence that the noun would move higher than NumP.

We now turn back to the nominalisation facts. We have already seen that the nominalised forms can be modified by an attributive adjective as well. In the spirit of the structure in (17) we assume a nominalisation is a VP with a nominal functional projection set on top of it. Some of these functional heads are never realised for semantic reasons. For instance, because nominalisations cannot occur in the plural (cf English: *Johns readings these books;

Dagaare:

Deŋ gama nye soŋu

Dery books these reading

'Dery's reading of these books'

but

*Deŋ gama nye soŋi

Dery books these readings

'Dery's readings these books'),

we also cannot quantify them (cf English: * After three readings these books; Dagaare :

*A gama nye soŋi ata

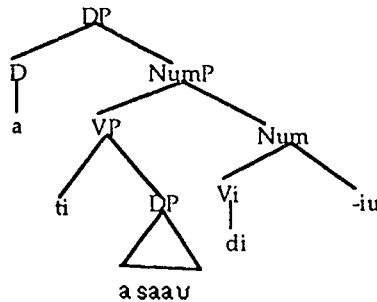
the books these readings three

'The three readings these books');

Q0 therefore always remains empty.

The phrase 'a saau diu' 'the eating of the millet pulp' now gets the following derivation (again we omit the irrelevant material)²:

(25)

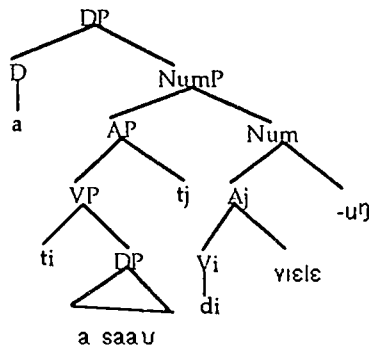


² We assume that in cases like these there is a surface rule deleting two adjacent definite determiners: a a → a 0

Instead of lexical N, it is lexical V that moves to Num0. We assume that the nominalising suffix *-iu* is a special instance of Num0 (cf. Bowers 1990 for a similar argument for English).

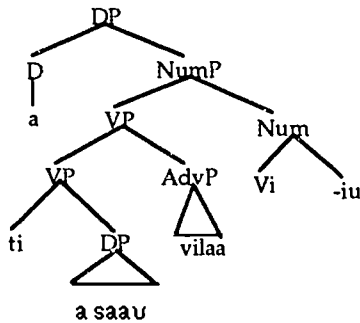
Given our assumption that AP projections are in between NumP and the lexical projection, we are lead to suspect that adjectives can also incorporate into nominalised verbs. As we have seen in (9), this prediction is indeed borne out, as shown in (26):

(26)



Again, there will be some phonological processes at work, yielding the surface form [di-vɛɛ|uŋ] of the morphological complex. The form in (9b) can be obtained in the same way, but this time the modifier is base-generated as an adjunct to the VP, not as an attributive A:

(27)



We can now also explain why Tense cannot be expressed in nominalisation constructions and why we only find the default aspect (perfective): we assume that these verbal inflectional morphologies would require corresponding verbal functional categories. Those are not available in a nominal phrase.

3.2 Serial Verb Constructions

In this section we introduce the phenomenon of serial verb constructions (SVCs) in Dagaare and some West African languages before we turn our attention to the interface relationships between serialisation and nominalisation.

Ever since Christaller observed the presence of Serial Verb Constructions (SVCs) in his (1875) pedagogical grammar of the Akan language, the phenomenon has grown to become one of the most topical issues in African linguistics. Together with concepts like ideophones and vowel harmony, SVCs constitute a core topic in the structural analysis of a great number of African languages. Indeed, it has been described as "perhaps the most interesting of the grammatical phenomena from a general typological point of view" in these languages (Stewart 1971). When we talk of serial verb constructions we generally refer to a grammatical concept involving a series of different

verbs and their arguments occurring within the borders of what seems to be a monoclausal construction. The following Dagaare, Akan and Yoruba sentences in (28), (29) and (30) respectively illustrate the concept.

- (28a) *Ayuo da di la a bie zigi*
 Ayuo past take a.m def. child seat
 'Ayuo seated the child'
- (28b) **Ayuo da di la a bie da zigi*
 Ayuo past take a.m def. child past seat
 'Ayuo seated the child'
- (29a) *Kofi tɔɔ nsuo numvi*
 Kofi buy+past water drink+past
 'Kofi bought water and drank it'
- (29b) **Kofi tɔɔ nsuo numvi nu*
 Kofi bought water drank it
 'Kofi bought water and drank it'
- (30a) *Olu gbɛ aso wo*
 Olu took dress wore
 'Olu put on some clothes'
- (30b) **Olu gbɛ aso Olu wo aso*
 Olu took dress Olu wore dress
 'Olu put on some clothes'

All the sentences above involve two different lexical verbs. They seem to share close grammatical relations. An obvious one is temporal markers. Both verbs must 'share' or be within the scope of one temporal marker for those languages that have these markers. This is exemplified in (28a) for Dagaare. Sentence (28b) is ungrammatical because there is an undesirable copy of the past tense marker.

Another fact within these constructions is that even though the V2's - 'zigli', 'numu' and 'wo' are two place predicates, they do not have direct object NPs coming after them. That is why (29b) and (30b) are ungrammatical. On the contrary, these V2's must share a direct object with V1. In (28), 'take' and 'seat' share the object 'child'. In (29) 'buy' and 'drink' share 'water'. Thus the postverbal object pronoun in (29b) which is co-referential with 'water' is unnecessary, making the sentence ungrammatical. This object constraint raises serious problems for the Projection Principle (Chomsky 1981) and its counterparts in most other grammatical theories. We do not take this up in this paper.

A third fact about the SVCs above is that the various verbs are in the scope of one structural subject. In other words, they share a single subject. So, (30b) is ungrammatical not only because of the undesirable occurrence of a post V2 object but also because of the extra occurrence of a subject NP, Olu, before the V2.

The surface configuration in (31) (from Awoyale 1988) is indicative of SVCs

(31) NP INFL/AUX [_{VP} V' V' ...]

The heads under the various V 's therefore seem to share just one subject NP and one INFL/Aux node. The whole construction then is seen as a single clause.

These are just some of the grammatical characterisations of the concept of SVCs. We must however mention that not all serialising languages manifest the same kind of grammatical constraints, nor do all kinds of serialisation have the same characteristics. The constraints here are outlined with respect to Dagaare and its closest relatives.

These and other constraints explicated in Bodomo (1993) may be summarised as follows in (32)

(32) Constraints on serialisation in Dagaare:

- i. **The subject sameness constraint:** All the verbs in an SVC must share a single structural subject or its referent.
- ii. **The TAMP³ constraint:** In an SVC there is only a single TAM node.
- iii. **The connector constraint:** There is an absence of conjunctions and/or complementizers within the string of verbs.
- iv. **The object sharing constraint:** Dyadic verbs must share direct internal arguments.
- v. **The Predicate constraint:** Verbs expressing the same type of event occur together

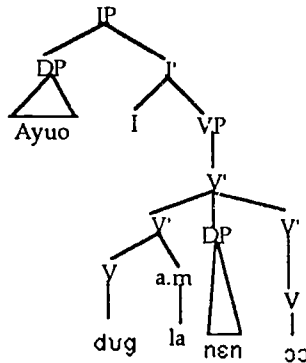
From the above we could just summarise that SVCs are constructions composed of two or more verbs sharing arguments and other grammatical properties within the borders of a single clause. This is what we call a complex predicate (a complex predicate being defined,

³ In Bodomo (1993) temporal, aspectual, modal, etc, projections, jointly called ,TAMP, are used instead of IP or AUX .

generally, as two or more predicates sharing a common subject and within the same clause).

We now turn our attention to the nominalisation of serial verb clusters. Without much discussion, we will adopt Baker's (1989) proposal according to which Serial Verb Constructions (SVCs) have the following structure (we choose the sentence in (2) as an example):

(33)



The precise structure of the VP is not of great importance to our present aim and goal. What is important, however, is the observation, made above that all verbs in an SVC bear the same inflectional information. This is illustrated in the following two sentences, of which the first one is in the imperfect aspect (marked with *rV*, where *V* is a vowel which is harmonic with the root vowels) and the second one is in the perfective aspect:

(34a) *Bayoo zoro gers wuoro la haani waana kuro ma*

Bayor run+IMP go+IMP collect+IMP a.m blackb. come+IMP
give+IMP me

' Bayor is presently going and collecting some blackberries for me''

(34b) Bayɔɔ zo gaa wuo la haani wa ku ma

Bayor run go collect a.m. blackb. come give me

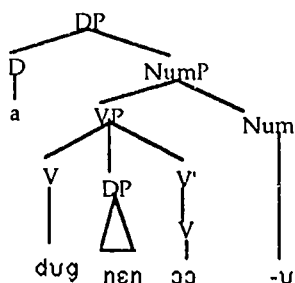
'Bayor has gone and collected some blackberries for me'

Let us assume that all verbal elements have to receive some aspectual interpretation, either perfective or imperfective. This feature [\pm perfective] is assigned to the VP by IO and from there it percolates downwards to all verbal heads participating in the VP. Because the feature is assigned to the VP exactly once, it follows that all elements get the same value for this feature. Furthermore, we make the following assumption:

(35) All verbal heads have to get a value for the feature [\pm perfective].

This principle causes the feature to percolate from the highest VP node to all Vs under this VP node. Now, let us consider a nominalisation construction. We give the D-structure of the construction in (10) as we suppose it to be:

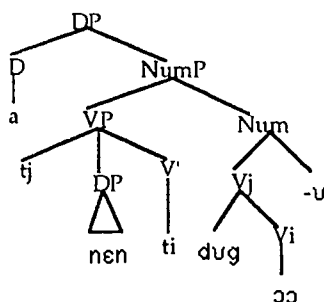
(36)



In this case, both verbs according to (35) need to get a value assigned for the feature $[\pm\text{perfective}]$. However, since there is no I0 in this structure which could assign this feature to either of these two verbs, something else has to be done. Now the lowest verb, ٣٣ , is obviously moved to Num0, as we can see if we study the morphological form. In that position, this verb is attached to a nominalising element; it no longer counts as strictly verbal and is insensitive to (35).

We have already seen that a lexical head goes through all intermediary (adjectival) heads, and it incorporates the material it finds there. Let us assume that the same happens here: ٣٣ first moves to the higher V position, it incorporates *dug* and then the complex form moves to Num0 as a whole. We end up with the following form:

(37)



This of course is the surface form. Notice that in this account the 'perfective aspect' is not really present on the verbs; but since the perfective has no special marker, the verbal forms look as if they are in that aspect.

A nice consequence of this operation is that it automatically follows that all verbal elements are adjacent in the nominalisation construction. This is a good thing because SVCs count as prototypical complex predicate constructions. Now complex predicates tend to

cluster in nominalisations in many languages. Chomsky (1970) for instance observed the following contrast for (American) English:

- (38a) He looks the information up.
- (38b) He looks up the information.
- (39a) *The looking of the information up (is difficult).
- (39b) The looking up of the information (is difficult).

Hoekstra (1986) observes a similar contrast for Dutch:

- (40a) Hij zoekt de informatie op.
he looks the information up.
- (40b) ...dat hij de informatie op zoekt.
that he the information up looks.
'...that he looks up the information.'
- (41a) *Het zoeken van de informatie op (is moeilijk).
the looking of the information up (is difficult).
- (41b) Het op zoeken van de informatie (is moeilijk).
the up looking of the information (is difficult).

Hoekstra (1986) argues that we cannot have complex predicates of the type shown above in a nominalisation construction because only arguments of the head of the construction can appear, which must be marked for the specific thematic roles they bear.

Because the particle does not receive a thematic role from the verb (just like the verbs in an SVC do not receive a thematic role from each other), the two elements have to form a *composite function*. In order to form a composite function, the particle and the verb have to be adjacent:

(42) Function composition (Hoekstra 1986:573)

Syntactically adjacent functions may be combined to form a composite function.

It is a favourable consequence of our approach to serial verb nominalisations that it follows from independent arguments that the verbs in the SVN cluster (each of them counting as a *function* in Hoekstra's terms) come out as a string-adjacent at S-structure. At that level, they can form a composite function. No special stipulations have to be made, everything follows from independently needed principles.

4. Conclusion

In this paper we have studied the structure of Serial Verb Nominalisations. We have seen that no special stipulations need to be made in order to describe this construction. Once we understand the nature of the nominal phrase, and the workings of the nominalisation process and once we understand the structure of the serial verb construction, we can combine insights from both areas and make predictions about serial verb nominalisations. The facts of Dagaare show us that this prediction is to a great extent correct.

By studying the interface relationships between the two phenomena we have also been able to explicate the 'complex predicate' nature of both serialisation and nominalisation.

References

- Abney, S. 1987. 'The English noun phrase in its nominal aspect.'
Doctoral dissertation, MIT.
- Awoyale, Y. 1988. 'Complex Predicates and Verb Serialisation,' ms.,
University of Ilorin and MIT, Cambridge, Massachusetts.
- Baker, M. 1989. 'Object Sharing and Projection in Serial Verb
Constructions'. Linguistic Inquiry 20, 513-553
- Bernstein, J. 1991. 'On the syntactic status of adjectives in Romance.'
Unpublished ms., CUNY
- Bodomo, A. B. 1993. 'Complex Predicates and Event Structure: An
Integrated Analysis of Serial Verb Constructions in the Maba
Languages of West Africa.' , Thesis, in Working Papers in
Linguistics, no. 20, Dept. of Linguistics, Univ. of Trondheim,
Norway.

- Bowers, I. 1990. 'The syntax and semantics of nominals.' in Cornell Working Papers in Linguistics 10.
- Carstens, V. 1991. 'The morphology and syntax of Determiner Phrases in Swahili.' Doctoral dissertation, MIT.
- Chomsky, Noam 1970. 'Remarks on nominalisations' In Readings in English Transformational grammar. ed. R. Jacobs and P. Rozenbaum, Waltham: Ginn.
- Chomsky, Noam 1981. Lectures on Government and Binding. Foris, Dordrecht.
- Christaller, J. G. 1875. A Grammar of the Asante and Fante Language called Tshi. Basel: Basel Evangelical Missionary Society
- Cinque, G. 1992. 'Functional projections and noun movement within the DP.' GLOW lecture, Lisboa.
- Halle, M. and Marantz, A. 1993. 'Distributed morphology and the pieces of inflection.' In K. Hale and S. J. Keyser (eds.) *The view from building 20: Essays in Linguistics in honour of Sylvain Bromberger*. Cambridge, Mass., The MIT Press.
- Hoekstra, T. 1986. 'Deverbalization and inheritance'. in Linguistics 24: 549 - 584
- Joseph B. and Zwicky A. M. 1990. ed. *When Verbs Collide: Papers from the 1990 Ohio State Mini-Conference on Serial Verbs*. Working Papers in Linguistics No. 39.
- Lefebvre, C. 1991. 'Take Serial Verb Constructions: Please,' in *Serial Verbs: Grammatical, Comparative and Cognitive Approaches*. Studies in

The Sciences of Language Series 8. ed. by C.Lefebvre,
Amsterdam/Philadelphia: John Benjamins.

Ritter, E. 1991. 'Two functional categories in noun phrases: Evidence
from Modern Hebrew.' Unpublished ms.

Sebba, M. 1987. *The Syntax of Serial Verbs* : An Investigation into
Serialization in Sranan and other Languages. Amsterdam:
Benjamins

Stewart, J. M. 1971. 'Niger - Congo, Kwa' In *Current Trends in Linguistics*,
vol. 7 ed T. Sebeok. Mouton: Paris

Van Haaften, T. van and Zubizaretta, M.L. 1987. 'English -ing and
Dutch -en nominal constructions' ms, Tilburg University.

Van Oostendorp, M. 1991. ' A Squib on Serial Verb Nominalisations in
Dagaare' ms, Univ. of Trondheim, Norway.

Valois, D. 1991. 'The internal syntax of DP and adjective placement in
French and English.' NELS 21